

Flaunt the imperfections: affective governance and London's 'Alternative Investment Market'

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Abstract

The literature of financial market design is predicated on the efficient market hypothesis (EMH), advocating transparency, liquidity, and universal information with a view to capturing efficient prices. This dominant understanding of the 'perfect market' is highly influential and has been played out in the technological transformation of 'main board' exchanges since the 1980s. Yet recent history provides a counterfactual: the 1995 formation of AIM, the London Stock Exchange's junior market. AIM employs an alternative – but effective – mode of market organization based on market *imperfections*. Our historical sociology shows how AIM's structure draws on affect – reputation, social relationships and practitioner knowledge to organise market governance; design choices were shaped by existing market relationships and practices as well as the institution's strategic commitments and organisational path dependencies. While finance literature remains sceptical of AIM's 'privatised regulation' we argue that the market's design should be understood as fit for purpose: capable of producing informationally efficient prices. We characterize AIM as having a 'Whitean' design structure, compared with the 'Fama' design structure of senior markets. We conclude that the 'Fama' model is just one possible configuration of a financial market, and that a 'Whitean' producer market is also a viable design option.

1. Introduction

From its inception, the STS-inflected analysis of markets (Çalışkan and Callon 2010, McFall and Ossandón 2014) has emphasised the performative construction of dispassionate, economized market relationships as a precondition for economic transaction, a process of ‘framing and disentangling’ (Callon 1998) epitomized by the transformation of the strawberry market of Fontaines-en-Sologne (Garcia-Parpet 2007). More recently, however, scholars have turned their attention to the role of entanglements in organizing market transactions (McFall, Deville, and Cochoy 2017, Deville 2012). They see consumption and production sitting in a dialectical relation, bound by material and affective attachments. Markets employ strategies of ‘qualification’ (Callon, Méadel, and Rabeharisoa 2002) to singularise products in the eyes of consumers who are, by virtue of this process, also producers. As the call notes, market mechanisms do not simply ‘dissolve social bonds, but also create and rearrange social, technical, emotional, legal, sentimental and practical links’. Within the broad theoretical domain of the ‘social studies of finance’ (MacKenzie 2009) scholarship has followed a similar trajectory, emphasising first of all the performative nature of economic thought (MacKenzie and Millo 2003, MacKenzie 2006a) and more recently the role of sentiment, imagination and attachment in the mutual construction and qualification of market goods (Vargha 2011, Muniesa et al. 2017).

There is here an intriguing link between these theoretical positions and the practical problem of organizing financial markets. On the one hand we see a dominant conception of how financial markets ‘should’ work, a highly performative financial knowledge based upon the eradication of social structures in markets. We term this a ‘Fama’ structure following Fama’s (1970, 1991) ‘efficient market hypothesis’. On the other, we see the emergence of other possible mechanisms of organizing financial markets, following the structures established in producer markets; we term these a ‘Whitean’ structure after White’s (1981, 2002) account of the organization of markets by reflexively aware participants. Both mechanisms pursue informational efficiency as a dominant design parameter. While the former arrangement – and variations from it – have been extensively theorised (see the contributions in Knorr Cetina and

Preda 2012), the latter have received much less attention. We illustrate the latter with an empirical analysis of the formation and organization of AIM, the London Stock Exchange's junior market. We show how attachments – social bonds, reputation and esteem – were fashioned into the regulatory backbone of a whole new genre of financial market that flourished across Europe and beyond in the first decade of the new millennium (Posner 2009, Mendoza 2008, Mallin and Ow-Yong 2013). While the Fama market seems unachievable, both theoretically and empirically, we argue that AIM's affective governance offers a robust and effective mechanism for an informationally efficient market.

AIM is the London Stock Exchange's (LSE) second market, founded in 1995 as a venue for higher-risk, smaller or growing businesses. The LSE's main market, the 'Official List', is able to trace its history back to the seventeenth century. Listing requirements are strict, and the LSE itself is responsible for the quality of new arrivals and the maintenance of a fair, informationally efficient market for securities. It does this using a mixture of external (national and trans-national) regulation and internal (private) regulation in pursuit of a 'Fama' structure. AIM, on the other hand, enjoys lighter listing requirements, and is governed by an unusual system of private regulation, with supervision delegated to Nominated Advisors, or Nomads. Operating within the same organization, and governed by the same external regulation, the two markets offer a natural experiment into differing modes of exchange governance (Jenkinson and Ramadorai 2013). 'AIM,' writes Mendoza (2008, 287) succeeds because it 'supplies a scarce product to the marketplace: rapid, low-cost access to public equity for small firms with high growth potential'. It answers an ongoing problem where financial regulators adopt a one size fits all strategy that imposes excessive costs on many market participants (Piotroski 2013, 216). Stringham and Chen (2012, 42) conclude that 'AIM's system shows flexible private regulation can serve firms and investors better than bureaucratic government regulation... Private regulators have an entirely different set of knowledge and incentives from those of government bureaucrats.' Yet there is substantial agreement that investment returns on the AIM market are substantially below those of the LSE's official list, and even below those of comparable markets for small-company stocks. Hornock's (2015) survey of the literature finds wide ranging estimates of underperformance (for example 28.6% to 33.5% over two years) and a strong association between capital raising and

poor performance. As he notes, this is problematic for retail investors who are often only able to buy into AIM firms at IPO; Gerakos, Lang, and Maffett (2013) also find that unsophisticated retail investors are particularly exposed to poor performance. These effects are felt even in the strongest sectors: during the property boom from 2005 to 2015, AIM listed property stocks underperformed their counterparts on the main board (Newell and Marzuki 2018). There is also widespread consensus that far fewer firms move to the main market than one might expect, particularly in view of the stated purpose of AIM as a nursery for growing companies (Jenkinson and Ramadorai 2013, Revest and Sapio 2016b).

Some contrary evidence is offered by Nielsson (2013), who argues that firms listing on AIM are smaller, but otherwise comparable, to firms listing in the US and continental Europe, that delisting patterns are also equivalent, while AIM stocks experience higher valuations and raise large amounts of capital. Nielsson (2013, 336) suggests that rather than attracting ‘lemons’ (as per, e.g. Piotroski 2013), small but high quality firms may choose to list in less regulated markets, and that a network of analysts, institutional investors, auditors, investment banks and the media may provide an ‘alternative bonding device’ to legal regulation. Hornock (2015, 347) argues that AIM ‘allows small companies to gradually mature in a public market environment’ until they are ready to move to a full listing. Vismara, Paleari, and Ritter (2012) highlight the ability of companies listing on these markets to raise capital through IPO and to do so again through secondary or ‘seasoned’ offerings. On this basis, and unlike the main market or venture capital, AIM has contributed to the creation of new firms, particularly in sectors where larger sums of capital have already been raised (Revest and Sapio 2016a). Finally, it may be that the main attraction of AIM is as a showroom for entrepreneurs wishing to sell their companies (Revest and Sapio 2016b). From the perspective of issue numbers and capital raised, AIM has been a great success: the market has hosted a total of 3823 companies, raising £44.5bn¹.

These more positive accounts anticipate the claims of our sociological perspective. As informational efficiency emerges as the dominant design principle for financial markets, we show how the market’s structure draws on social relationships and practitioner knowledge to achieve this: design choices were shaped by existing market relationships and practices as well

¹ <https://www.londonstockexchange.com/statistics/markets/aim/aim.htm> [accessed 15 August 2018]

as the institution's strategic commitments and organisational path dependencies. In practical terms, the market's regulation would seem fit-for-purpose; in theoretical terms, we suggest AIM's 'Whitean' structure provides a counterfactual to the performative Fama market found on main-board exchanges.

The structure of the paper is as follows. In the next section, we examine the link between economic theory and the design of financial markets, with particular reference to market 'efficiency'. We then turn in Section 3 to the analysis of social structure within financial markets and the relationship between social structure and informational efficiency. Section 4 outlines methods. Section 5 presents the empirical data on the AIM market. Section 6 discusses implications and wider issues.

2. Economic Theory and Financial Markets

When Ronald Coase described financial markets as examples of perfect competition he was describing the views of the economics profession, rather than the practice of markets. Paradoxically, as Coase also notes, the conditions of a perfect market require an authority structure to secure the market 'involving an intricate system of rules and regulations to prevent malfeasance' (Coase 1988). As many researchers in the sociology of finance tradition have noted, financial markets are deliberately designed structures (e.g. MacKenzie 2009); the additional insight available from the Coase approach is that, once designed, these 'market wrapped in a hierarchy' devices must be regulated and maintained in order to avoid the emergence of market imperfections.

Since Coase wrote, the number of financial exchanges has expanded substantially. There has been a growth in geographical coverage (Weber, Davis, and Lounsbury 2009), and in specialisation (for example, carbon futures exchanges). The vast majority of exchanges are *firms*, either publicly quoted – for example the London Stock Exchange is a firm whose stock is traded on the London main market – or privately owned (MacKenzie 2017). It is now possible to speak of an exchange 'industry' in which competition, collaboration and mergers occur. Empirically, Coase's 'market in a hierarchy' description has been robust at an industry level.

Exchanges exist to bring together investors in and sellers of securities – for example firms in equity markets and governments in bond markets. They do so by building platforms that minimise the transaction costs of trades, maximise trading completion speeds and generate pools of liquidity so that trading can be continuous. There are huge network effects – attracting trades is self-sustaining and exchanges seek to maximise order flow. Competition between exchanges may be on cost and speed, but also by differentiation, perhaps by specialisation on specific securities, or by ease of listing. Revenues consist of fees for transactions clearing and settlement, membership fees for firms to be listed and, most importantly, charges for quote and price information (Lee 1998). However, such information is not costless to produce, so the business models of financial market exchanges require that access to price information be restricted to a set of identified actors (Lee 1998, 46-67). There arises, therefore, a necessary tension between the commercial concerns of financial exchanges and the principles of perfect market organisation on which they are based: anonymity, continuous auctions, homogeneous and standardised commodities, liquidity and effective enforcement (Garcia-Parpet 2007). For financial markets in particular, the core issue is price information, and the key theorists are Walras and Fama.

Walras proposed the existence of a notional auctioneer in a market who conducts continuous auctions around the price of commodities, adjusting the price to supply and demand (see Lee 1998, 216-7). Under Walrasian assumptions, there exists a unique market clearing price for each commodity and the price contains all relevant information such that agents in the market do not need to engage in costly search about either the underlying value of the commodity or other market participants. This Walrasian approach has been adapted by Fama (1970, 1991) to financial markets in the ‘efficient markets hypothesis’ (EMH). For Fama, a market is efficient where prices fully and instantaneously reflect all available relevant information² about a security. With such informational efficiency, prices thus become the key signals in capital allocation decisions; i.e. informational efficiency yields allocative efficiency. Arbitrage is key. Individual agents trade to maximise profits so, if they have private positive information about a

² There is a difference between earlier and later versions of the hypothesis around the meaning of both ‘relevant’ and ‘available’. See Fenton O’Creevy et al (2004)

security, they will buy it and the private information becomes public by showing up in the price. Given that the current price should be the best estimate of the future price, prices in an efficient market should follow a random walk³. As Lee puts it:

“Fama’s notion of efficient markets has come to underpin much regulation concerning the dissemination of price and quote information in financial markets....Without the publication of prices and quotes ...market participants will not have sufficient information to be adequately informed, that the prices of assets traded in the market will therefore not be informationally efficient and that allocative efficiency will therefore not obtain.” (1998, 222).

From this understanding emerge design parameters for an exchange requiring that all agents in the market have the information necessary to trade both costlessly and immediately, and perfect competition, such that multiple sellers cannot fix prices. It relies upon an underlying assumption of atomistic, profit maximising, non-colluding individual market participants. This dominant understanding of the ‘perfect market’ is highly performative and has been played out in the social and technological transformations of ‘main board’ exchanges since the 1980s (Castelle et al. 2016). The dominant design parameter for exchanges is informational efficiency; the test of any empirical deviation from this social structure in a given market is how it impacts informational and therefore allocative efficiency.

3. Social Structure and Efficiency.

The most general points to make about the economic approach to financial markets are as follows. The Coasian idea of a financial market as a perfect ‘market wrapped in a hierarchy’ rests on the fairly strong assumption that the two forms of social structure can be kept separate. As Lee notes above, the hypothesis has been extremely influential in its impact on the design and regulation of exchanges. The interplay of social structure and regulatory form may here be characterized by the Granovetterian position, where markets are constructed as efficient and

³ More accurately, since stock prices cannot go negative, a log-normal random walk.

social structures emerge within them as heuristics to protect individual market agents from downside risk or unexpected volatility. If social structures emerge in efficient markets they are likely to act in favour of market participants and against broader welfare issues. Such structures will be diagnosed as imperfections to be regulated away. This logic characterises Fama designed markets, including the LSE main market. It implies the primacy of external market regulation as a control mechanism.

Exchanges themselves have a dual social structure, serving two distinct purposes: as a locus of financial transactions (markets) and as a provider of exchange services (firms). As exchange ‘producers’ they *provide* a switch-role Fama market to buyers and sellers of securities, and *occupy* a fixed-role producer market (Aspers 2007, Castelle et al. 2016) where the market’s basic organization stems from the producers’ mutual and reflexive awareness of themselves and their rivals. This latter was theorized by Harrison White, for whom ‘knowing oneself, and being known, to be in a given market is the single most important aspect of getting established in business’ (White 2002, 121). In White’s account, social structures emerge or are designed to provide a framework for specific sets of transactions between market participants. They serve to provide economic benefits to market participants to the extent that they do not jeopardise or undermine the social structure that constitutes the market. As Castelle et al. (2016, 169) note, ‘the exchange is a site which has aspects of both fixed-role markets – i.e. multiple exchanges may compete to provide trading services for brokers and dealers – and switch-role markets: i.e. the familiar, furious ‘trading floor’-style buying and selling of shares’. The proliferation of the ‘Fama’ model, combined with existence of exchanges as businesses in their own right, operating in a competitive market for financial services, would suggest that the ‘Fama’ structure appeals as part of the business proposition of main board exchanges. This begs a rather different question: would a more ‘Fama’ exchange out compete a less ‘Fama’ exchange? More specifically, would an exchange in which prices did contain better information on future returns always triumph, in the sense of attracting more and higher quality investors, firms and governments, over one which did worse?

Perhaps the most telling criticism of the EMH in this respect is that of Zuckerman (2012, 230). He notes that arbitrage is both central to the generation of informational efficiency and

highly unlikely by Fama's own reasoning; since arbitrage has very low returns to the arbitrageur, it is irrational to engage in it, and if no market actor does, prices do not reflect value. He puts it succinctly: "*...if all investors believe in the EMH, the market cannot be efficient*"(italics in original). It degrades into a collective action problem. Willman et al. (2001) reach a similar conclusion by a different route, arguing that traders in markets hold contradictory beliefs: that the EMH broadly works but that they can also beat the market. Efficient markets depend upon noise (Black 1986), though as Willman et al. (2006, 1362) point out, sociological research has been successful in theorising the issue, with explanations centring on the interrelated processes of learning, information search, reciprocity, and network building. Put colloquially, for EMH to work, some of the people need to believe it all of the time or all of the people some of the time, but not all of the people all of the time. Indeed Roscoe's (2015) empirical study shows just this, as investors balance a long-term belief in the efficiency of markets with a short-term expectation of collective misjudgement leading to profit opportunity.

In practice, most financial markets solve the arbitrage problem through mechanisms of social structure: by defining a role of 'market maker' who performs the arbitrage role of buying when there is excess supply and selling when there is excess demand, transacting against the market. Because they trade from their own inventory, they are central to the sub-discipline in academic finance known as 'market microstructure' (see O'Hara 1995) . They have a clear economic function in creating price stability, processing and communicating information and supplying continuous trading and liquidity. The most substantial sociological account of these roles is that of Abolafia (1996), who studied market-making in bond, equity and futures markets in New York. Abolafia offers a third conceptual framing of markets, where markets and social structures are logically complementary, and co-exist with a constant tension between short term profit taking (opportunism) and long term market maintenance. Regulation seeks not only to monitor transactions but also regulating the behaviour of market participants, resulting in an 'arms race' between the practices of market participants and the development of new regulation. Abolafia's classification of the range of controls on market maker behaviour is a useful heuristic for us to consider the wider question of the relationship between social structure and informational efficiency in financial markets. He identifies three levels.

1. Individual: "...situationally specific, culturally proper strategies, enacted from a pre-existing repertoire. This repertoire, or tool kit defines the range of appropriate behaviors on the trading floor."
2. Transactional: " norms of exchange and reputations for trustworthiness....Transaction opportunities come to be shaped by each actor's reputation in a network of other traders" He adds a second element that may be distinct, i.e. "the more formal set of organizational arrangements created by the self-regulatory organisation. ...Market norms are formalized into rules and standards, and exchange sequences into required procedures."
3. Regulatory: "Its role varies from market to market, ranging from loose oversight to active intervention...In recent years, increasing regulatory attention has led to enhanced self-regulatory enforcement at the exchanges". (Abolafia 1996, 174-5)

Market makers have substantial opportunity to pursue self-interest and profit rather than perform their informational functions, and Abolafia sees these various interacting levels of control not only as preventing excessive 'opportunism' but also ensuring that the informationally efficient elements in the role are pursued. These elements, if not this classification, resonate with a range of findings about the working of exchanges in the sociology of finance literature on both open outcry and electronic markets (see for example the collection at 115-223 in Knorr Cetina and Preda 2012): there appear to be formal and informal controls, conventions and norms and values other than self-interest in most financial markets.

To recap, economic theory of financial markets positions informational efficiency as the dominant design parameter for financial markets. The 'Fama' structure has been reproduced across exchanges operating in a competitive market for firms, which leads us to wonder whether a more 'Fama' exchange out compete a less 'Fama' exchange. The problem of noise, as theorized by sociological studies, makes clear that the structure that Fama suggests generates such efficiency – irrational arbitrage in an atomistic market – is neither logically or empirically possible in its pure form. Social structure becomes essential in the maintenance of market function. We may thus examine elements of social structure in terms of whether they facilitate, impede or are neutral with respect to informational efficiency, and more generally, the commercial positioning of exchanges *as firms*. On the basis of this discussion, we proceed with the following propositions.

1. Informational efficiency in a financial market cannot be attained without first designing into the market some mechanisms to promote it and prevent malfeasance
2. There may be several social structural options to achieve a given level of informational efficiency, specifically:
 - a. The balance between individual, transactional and regulatory controls may differ by market, for any given level of efficiency.
 - b. Investors and firms may have different preferences for market social structures.
 - c. Exchanges operate in a competitive market for exchange services: different financial markets may adopt different structures in response, in order to attract or repel certain sets of firms or investors.

4. Methodology

We explore this thesis via a ‘historical sociology’ (MacKenzie and Millo, 2003) of the two stock markets. Over a period of 18 months, from 2016-2017, the first author conducted 54 interviews with almost all of the major participants in the new markets (39 participants, totalling 73 hours). Many interviews were conducted on a named basis appropriate to the historical nature of the project. Interviews followed a strategy of oral history (Yow, 2005), seeking to elaborate individual careers and spark recollections of key events. Oral history of business activities remains uncommon in British scholarship; Perks (2010) makes a strong case for overcoming what he considers a ‘debilitating ideological resistance’ to a potentially productive area of work, arguing that oral history can make important contributions to our understanding of business and its relation to society. Personal communications and informal conversations also contributed and we make use of textual sources as a complement to interview accounts and a means of triangulation. Textual sources amounted to over 1000 pages and included newspaper articles, company documents, prospectuses and annual reports, newsletters and lobbying materials, regulatory disclosures, press releases and marketing materials. We also use previous published and unpublished work on the operation of the AIM market.

5. Analysis: AIM's 'affective governance'

Our premise is that exchanges must design some kind of governance mechanisms into their organizational structure to avoid malfeasance and promote informational efficiency, and that their choice of mechanism may be governed by the logics of competitive positioning within a market for exchange services. We focus on AIM as a market that has implemented – successfully – a distinctive kind of governance based on social and affective ties. In this, we suggest, it has a Whitean structure rather than the idealized 'Fama' structure. We organize the empirical section as follows. First we present data on background and formation of the market. Second, we analyse its structure and operation, paying particular attention to the making of the market.

a. A market built from networks

The Alternative Investment Market (AIM) is the junior growth market of the London Stock Exchange (LSE). Despite increasing competition among global exchanges, AIM has established itself as the world's leading stock market for younger and smaller companies with high growth potential (Arcot, Black, and Owen 2007, Hornock 2015). AIM's remarkable growth has been widely acknowledged, and AIM as a market model has also drawn the collective attention of international market participants; following the collapse of the dot-com bubble the 'NASDAQ model' fell out of favour and was replaced by the AIM model as growth-company exchanges spread across Europe and beyond (Posner 2009, Mendoza 2008), and replicated in AIM Italia and Tokyo AIM (Mallin and Ow-Yong 2013).

AIM's distinctive arrangements owe much to the circumstances of its founding in 1995. Several important developments had forced the LSE to consider launching a designated market for smaller company securities. The Exchange's newly installed chief executive Michael Lawrence saw establishing a new market as a means of dealing with the strategic problems pressing upon the exchange, notably quietening the political pressure that followed the closure of the SME-

focused 'Unlisted Securities Market' (Posner 2009), and offering a strategic repositioning of the LSE, with a focus on serving the British regions and 'UK plc'.

'The whole idea of AIM, which was to for the London Stock Exchange to re-engage with the regions, I think Michael's idea was a lot of these smaller companies, earlier stage companies are not going to be walking about the City of London, you know, they're going to be in the UK regions. This was like a kind of back to the future to I think the older days where there were regional exchanges... (Hughes interview)

The LSE was in need of new strategic direction following an extensive, public IT debacle that had seen it lose its settlement role to the Bank of England. AIM was, therefore, designed from the outset as a market embedded in sets of social relations, here with corporate finance firms and issuer companies across the nation. It sought to preserve a distinctive culture of small company equity finance that existed in the UK (Wallis interview). Lawrence recognized that a new approach to listing would be vital, and that, in the conservative institutional culture of the LSE, this would require an entirely new listing team. He placed Theresa Wallis, a relatively unknown executive who had transformed the LSE's Eurobond listing process, in charge of a working party with a brief to think about listing in a completely new way, recognizing that social relations underpinned the process of small company investing:

'One of the things I heard and learnt when I first came on with the role was... investors, when it comes to small companies they'd rather invest close to home where they can go and visit the companies and they look them in the eye and all that sort of thing.' (Wallis interview)

McFall et al. (2017) argue that the consumers of products, or services, are 'in' these things even as they are produced, and so it seemed here. Wallis' team talked the market into being (Palo, Mason, & Roscoe, 2018) through an extended period of consultation with other market actors: issuers, corporate advisors and legal firms. A process of issuing review documents, soliciting responses and formally dealing with them ensured that the market was collaboratively produced from the outset.

'Knowledge building, consensus building, to inform an emergent model. This was a continuous iterative process. The Exchange was very diligent and quite pedantic in the

way that they would issue their consultation document. They would receive the responses, the responses would be considered, we would discuss them during our morning review meetings. ' (Hughes interview)

These attachments, combined with the bull market of the late 1990s, saw AIM established as a leading European venue for smaller-company listings. Figures 1 and 2 show relevant data from inception (1995) to the present. AIM succeeded in both respects, particularly in the period after the end of the first dot.com boom in 2001, and performed strongly until 2008. The market is smaller than in 2008, but fundraising activity remains strong. In 2018, approximately 950 companies were listed, with an average market capitalisation of approximately £100 million; in 2019 this number had fallen to 903, with an aggregate value of £98bn.

Figure 1. Admissions to the AIM market.

Source: LSE

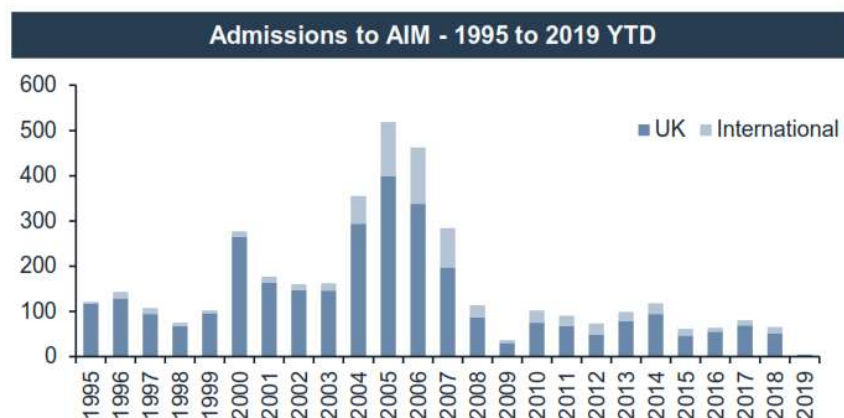
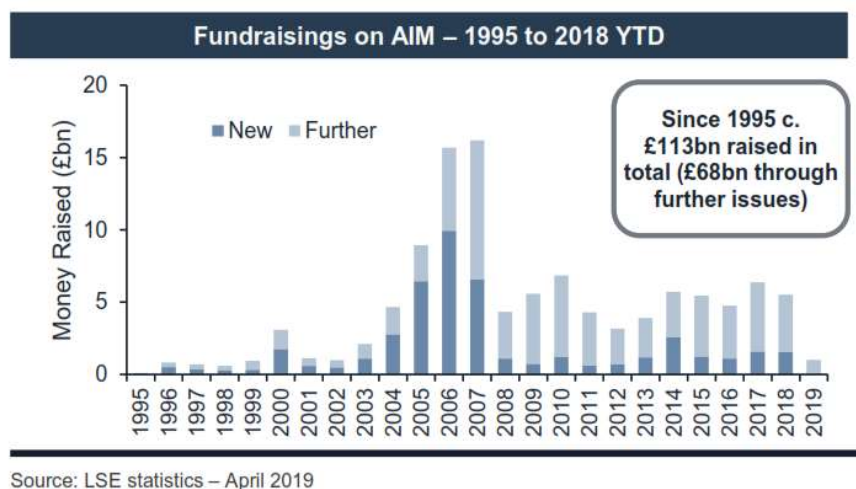


Figure 2: Aim Funds raised and Market capitalisation

Source: LSE



The market clearly positioned itself against the LSE's main board in terms of its listing requirements (these are shown in table a below). It filled the space vacated by the USM, designed as a mechanism for younger, smaller, entrepreneurial firms, offering a listing venue for newly-formed companies with lower capitalization and free float requirements; as Jenkinson and Ramadorai (2013, 860) note, 'it is literally possible to create a new company and have it trading on AIM within two to three weeks'. A variety of regulatory innovations made this possible. AIM was classified as an exchange-regulated market run by the London Stock Exchange (LSE). The nature of an exchange-regulated market allows AIM to waive most of the mandatory provisions contained in European Union Directives as applicable to public listings in the UK, and permits it a form of self-regulation, which is pivotal to the rise of AIM's model. The admission requirements and ongoing membership rules have been kept simple, in order to encourage a wide variety of companies to join at minimum cost, and the corporate governance provisions are not mandatory. An AIM admission does not fall under any regulatory body. There are no specific requirements regarding minimum company size, track record, number of shares in public hands, or earnings. After admission, the ongoing obligations with which firms must comply are kept at a minimum. AIM companies, for example, do not need to obtain shareholder approval for transactions other than reverse takeovers or fundamental disposals (disposals of more than 75% of assets). Yet a market needs a mechanism to avoid malfeasance and to ensure some kind of

informational efficiency, and such light touch requirements were only possible due to the dense social networks and interpersonal-knowledge within London's financial community, which the market's designers co-opted into a new mode of private regulation.

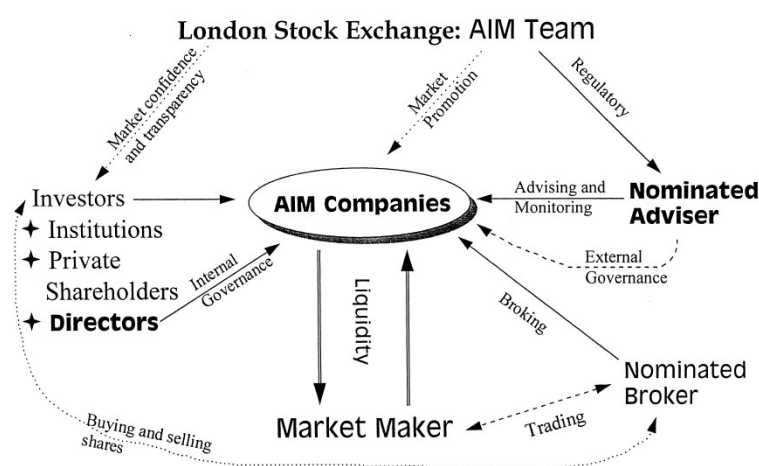
Table a: Listing requirements and obligations, Main market and AIM compared.

Source: Jenkinson and Ramadorai (2013)

Main market	Alternative investment market
Admissions requirements	
Minimum 25% shares in public hands	No minimum shares in public hands
Normally 3 year trading record required	No trading record requirement
Pre-vetting of admission documents by the UKLA, or another recognised EU authority	Admission documents not pre-vetted by Exchange or any listing authority
Admission takes several months	Admission can be achieved within 2 weeks
Minimum market capitalisation on entry (£700K)	No minimum market capitalisation
Sliding scale admission fees: e.g. £16K, £49K, £142K respectively for £10m, £100m and £1bn market cap at issue	Nominated adviser required at all times Flat rate admission fee: £4K
Continuing obligations	
Prior shareholder approval required for substantial acquisitions and disposals	No prior shareholder approval for transactions
Sponsors needed for certain transactions	
Companies are subject to extensive continuing obligations as required by the UKLA	
Sliding scale annual fees: e.g. £8K, £8K, £20K respectively for £10m, £100m and £1bn market capitalization stocks	Flat rate annual fee: £4K
Other costs and benefits	
Fees charged for subsequent issues	No charge for subsequent issues
	Aim companies enjoy some tax benefits - since UK tax authorities treat most AIM companies as unquoted "business" assets

b. Nomad-based regulation

In contrast to the US practice, which relies more heavily on a rules-based approach, the disclosure and corporate governance provisions for AIM companies are less prescriptive, following the UK tradition of principles-based approach.⁴ A ‘disclosure-based’ stock market relies upon the principle of caveat emptor, focusing regulatory efforts around ensuring full disclosure of financial information and assuming that investors have sufficient sophistication to act accordingly. Quality control is not exercised by the Exchange, but outsourced to a network of professional advisers. At the forefront are the Nominated Advisers or ‘Nomads’, the corporate finance firms bringing issues to market. Listed companies are required to retain a Nomad, and if they are unable to do so will be forced to leave the market. Nomads have an ongoing responsibility to their client firms in terms of providing advice, mandating adequate disclosure and overseeing compliance with the regulation. Nomads themselves are policed by reputation and a concern for repeat business, making AIM a ‘reputational market’ (Mendoza, 2008, p. 333). Such thinking is epitomized by the Telegraph newspaper’s conclusion to the story of one market misdemeanour: ‘a good public flogging serve[s] to remind brokerage houses to show a little caution in who they bring to market in the first place – and the importance of never, ever misleading investors’ (quoted by Stringham & Chen, 2012, p. 42). Figure 3 illustrates the key participants in AIM.



⁴ A principles-based approach relies upon principles and outcome-focused rules rather than detailed rules prescribing how outcomes must be achieved (“Principles-based regulation”, FSA, April 2007).

Figure 3 Key participants in the Alternative Investment Market

Source: Mallin and Ow-Yong (1998)

The AIM rule states that a Nomad must be independent of the issuer, must be a firm that has practiced corporate finance for at least the previous two years, has acted on at least three relevant transactions during that period, and has employed at least four qualified executives. Qualified executives are full-time employees who have acted in a corporate finance advisory role for at least three years and who have acted as the lead on at least three appropriate capital market transactions in the previous three years. Tim Ward, in the mid-1990s a young LSE administrator responsible for drafting the initial specification of the governance role, explains:

‘The Exchange did not want firms which did not have a reputation to suddenly pop on this market and build their reputation on the back of the market. It was necessary for the firms that were nominated advisors to have a reputation that they needed to protect and enhance, rather than one to create. So it was not one for new boys to come in saying we are going to build our business off the back of this....the idea was that there had to be four people within any firm who had done relevant transactions, and a certain number within the last two years I think it was, so that they were experienced, qualified and able to do the role that had been set out for them by the Exchange.’ (Ward interview)

Nomads simultaneously play roles as AIM advisors, gatekeepers, and regulators. Their interests are aligned with those of investors by the necessity of future business:

‘[Institutional investors] know the nomad and broker community, they have got a very important sanction in that if a firm was to repeatedly bring poor quality companies to the market then they would very quickly find that they could not go back to the institutional investors to support either further IPOs or further capital raisings by existing AIM companies.’ (Stuttard interview)

Institutional investors also recognize the importance of Nomads, as illustrated by the following analogy: “AIM is like an exotic garden, which provides the soil, the light and temperature. Companies are young plants with different genes. The Nomad is the gardener, selecting the

seeds, fostering their growth, and maintaining the garden.”⁵ Such selection and tending is based on dense market ties and knowledge:

‘When it came to AIM, there was a network underneath which says, that company, don’t touch it. And so an awful lot of this stuff was unwritten, unrecorded, but by and large, one of the reasons why AIM survived better than most was because we did things like that. Can’t discuss it publicly, deny all knowledge.’ (Vardey interview)

And,

‘[x] and [x] had a "cerebral database". [x] would phone [x] and ask do you know about so-and-so and would get a yes, no, don't touch with a bargepole answer. But you couldn't write any of it down so they called it a cerebral database.’ (Hocken interview)

Nomads are liable for improper reporting by their supervised companies, such as misstatements or omissions in an admission document, and subject to lawsuits if investors are misled. With these disciplinary actions and potential litigation risk comes greater risk of reputational injury because these cases would attract publicity and produces reputational damage (Coffee 2006). The Exchange periodically issues rebukes and fines in cases where Nomads fail to discharge their responsibilities properly.⁶ Despite the availability of a much broader range of measures, censure and reputational damage remain the most powerful levers available to the Exchange, operating the ‘tools and instruments of a club’:

‘I think in many ways the essence of AIM, and if you like, the way in which it was operated, [owed] more to the clubbable aspect of the Exchange, and the black-balling and the fact if you look at the sanctions the Stock Exchange had they were not those that modern regulators have to impose an unlimited fine. I think there was a fining power on issuers but hardly to be used. The censure was the thing, a private censure...[and] the

⁵ Speech by David Pinniger from Abingworth Life Sciences and Healthcare Investment in a seminar on AIM at LSE on 12 March 2008.

⁶ On 8 August 2005 the LSE issued its first public rebuke of a Nomad, Durlacher Corporation (a former investment banking company which has since merged with Panmure Gordon & Co.), for delaying a profits warning by its AIM-listed client Prestbury Holdings for eight days while the company carried out fundraising. On 19 October 2007 Nabarro Wells became the first Nomad to be fined as well as publicly censured for breaching the rules of the market. The breaches included the failure to undertake the necessary level of due diligence or to make careful enquiry into admission documents of companies that it was bringing to AIM; the fine for this and other failings was £250,000. On 22 June 2009, the Exchange issued another public censure and imposed a fine of £225,000 on AIM Nomad Astaire Securities plc, formerly Blue Oar Securities plc, highlighting a number of failings by Blue Oar to question the accuracy of its client’s announcements and to assess its ongoing suitability for an AIM listing. In addition, there were a number of private censures of AIM companies and Nomads for breaches of the AIM Rules. (Source: Stock exchange AIM disciplinary notices and news, for example, “AIM fines broker for poor conduct”, by Alistair MacDonald, *The Wall Street Journal*, 20 October 2007).

public censure, which was really only ever used when you were trying to give a signal that somebody was a wrong 'un...These are very much the tools and the instruments of a club.' (Brickles interview)

This public shaming by the Exchange invokes reputational sanction by the market and can be a powerful and effective social control to enhance the enforcement on compliance. Despite the claim in academic finance literature that AIM is 'unregulated' participants see matters differently, with the LSE active in supervising Nomads on an ongoing basis, and exercising regulation through them. In sum, AIM's governance system invokes social bonds, reputation and esteem to ensure that information available to investors is transparent and appropriate.

c- Investor-based regulation

Although the Nomads carry legal responsibility for supervision, the tight network of institutional investors that operates in the market also assists in information flow. AIM has developed a strong track record in raising money for growing businesses, having raised some £98 billion since 1995. Roughly 60 percent of this capital has been raised through secondary, or follow-on issues.⁷ AIM has attracted a particularly well developed base of institutional investors, including many recognisable names such as Fidelity, Goldman Sachs and UBS, which lead a deep and highly sophisticated pool of institutional capital dedicated to small and mid-cap shares. The market is dominated by institutional investors to a much greater extent than, for example, NASDAQ in the USA (Arcot, Black, and Owen 2007). Unlike retail investors that trade more frequently for short-term benefits, institutional investors are potentially stable, long-term holders of these shares. Furthermore, with relatively few retail shareholders, most IPOs and secondary offerings on AIM take the form of private placings with institutions. A significant number of AIM-listed companies seek to raise additional capital from their existing shareholder base over time. The day-to-day work of investors involves meeting with and building relationships with the managers of

⁷ <https://www.londonstockexchange.com/companies-and-advisors/aim/faq/faq.htm> [accessed 22 May 2019]

potential and actual investee firms, who in turn maintain tight links with a small number of investors. One specialist fund manager comments:

‘I probably see them [investee management] once every six months. But I’ve known them...I must have known them pretty much for, well 25 years. The chief exec’s been there probably for 15....People ring me up and say, I’ve got a really interesting company I’d love you to see, and I say fine, here’s a spot in the diary.’ (Williams interview)

The lack of retail investors means that institutional investors wield a great deal of influence in these book-building negotiations, as another fund manager makes clear:

‘They [brokers] come and see you and they do a presentation...and they say, we want 10p and you say, maybe five, eight, two? I’ve been spoken to by brokers and financial advisers to companies many a time saying, well, if we make it 7p would you do half a million quid or something to which the answer is, no, it’s going to be 5p or nothing and I’ll do a million quid at 5p or, you know...I’m not going to pay the wrong price as I see it for a smaller sum of money. It’s right or wrong. The sum of money is irrelevant. It’s right or wrong.’ (Buchanan interview)

As an effective interface between investors and start-up companies, Nomads themselves take on a considerable reputational risk. Some market intermediaries commented that “the task of financial due diligence on AIM is not easier than the Main Market and even greater than the US”⁸. The institutional investors active on AIM know about market players and have a long memory of Nomads that they have dealt with. Nomads who bring weak companies to AIM or whose due diligence turns out to have been deficient will be shunned by investors on future occasions.

Issuer firms also need to maintain a broker, whose job it is to maintain an orderly market in the stock. Again, this involves building comprehensive relationships with institutional investors, working to develop an ongoing demand for the stock so that, should a large shareholder choose to liquidate a holding, the market remains unscathed. Unlike the archetype of the ‘Fama’ market, where all transactions need to be conducted in daylight, these transactions

⁸ Speech by Tom Troubridge from PWC, at the Corporate Governance Research Seminar on AIM at the London School of Economics on 12 March 2008.

have the potential to wreck the share price and the prospects of an orderly market. They must be dealt with backstage:

‘The market price, the price you see on the screen, is generally set by the retail investor, the balance of buyers and sellers, all these five grands and ten grands and 20 grands worth of stock....so they will interact with our market makers, which will adjust the price depending on the supply and demand in the market. The institutional investors generally stay out of that. They don’t deal in small amounts. But if they want to sell a million pounds worth of stock... I can ring up another institutional investor, and if he agrees to buy it at that price, we match them. So the million pounds worth of stock goes through the market, one’s sold, one’s bought. But it doesn’t change the market price. Someone can come on and buy ten thousand pounds worth and it will put it up, or if they buy or sell, it could put it up or down by five to ten per cent.’ (Norcross interview)

This mechanism of direct transfer does in fact closely resemble an increasingly common form of transaction in main board markets, the deals between investment banks carried out in “dark pools” or over electronic networks: large transactions made at the mid-price so as not to disrupt the market (MacKenzie 2019, Lagna and Lenglet 2019). Again, these ongoing trades can only be made possible by the constant, exhausting work of the nominated broker in maintaining positive affectual bonds between investors and firms.

Discussion: Fama and White markets

Coase argued that the aim of financial market design and regulation was the minimisation of transaction costs. The ‘market within a hierarchy’ constitutes a ‘private legal system’ and

“enforcement of the rules is possible because the opportunity to trade on the exchange is of great value and the withholding of permission to trade is a sanction sufficiently severe to induce most traders to observe the rules of the exchange” (1988, 10)

The most basic part of our argument is that there may be more than one set of rules of private law that fulfil this necessary condition. Informational efficiency becomes the dominant design principle of the exchange, and exchanges must design some kind of governance mechanisms into

their organizational structure to achieve this by avoiding malfeasance. As private law may differ, so their choice of mechanism may be governed by the logics of positioning within a market for exchange services. In the most part, as we have seen, exchanges have sought to implement 'Fama' market structures, where social structure is seen as an impediment to market function, the Granovetterian position (Preda 2009); this logic characterises Fama designed markets, including the LSE main market, and implies the primacy of external market regulation as a control mechanism. We have drawn attention to the impossibility of the Fama structure in practice, and a hybrid likely to result in the situation described by Abolafia (1996), where regulators and market practitioners conduct an ongoing dialogue between external regulation and the internally generated rules and conventions of the market. As Abolafia notes, market rules may involve regulatory frameworks for exchanges on the one hand (external) and sets of norms and conventions on the other set by market participants who have substantial investments in an exchange (internal). Similar observations have been made by (Michie 2006) about several securities markets, including the main market in London for much of its history, and by Mackenzie (2006b) about the Chicago markets. We suggest that there may be alternative social structural options to achieve a given level of informational efficiency, specifically:

- a. The balance between individual, transactional and regulatory controls may differ by market, for any given level of efficiency.
- b. Investors and firms may have different preferences for market social structures.
- c. Exchanges operate in a competitive market for exchange services: different financial markets may adopt different structures in response, in order to attract or repel certain sets of firms or investors.

We have shown how AIM established a system of private regulation based on social structures and a pre-existent equity culture and how the system is designed to facilitate information flow in an informationally opaque and often illiquid market. A second part of our argument is, therefore, that the balance between external regulation and internal self-regulation is an important design choice and source of variation in systems of private law for financial markets.

We suggest that alternative structures may, in fact, be just as successful as the established 'Fama' market. We have focused on AIM as a market that has successfully

implemented a distinctive kind of governance based on social and affective ties. Jenkinson and Ramadorai (2013) regard AIM and the main board as a natural experiment between two competing sets of private law. In as much as AIM was conceived as a feeder for the main market it has not been successful. Jenkinson and Ramadorai (2013) found that over the period 1996-2006 only 56 of approximately 1600 firms made the move upwards, less than a quarter of the number moving from the main market to AIM. 'Upward' movement decreased across the period whereas 'downward' movement increased. Importantly, moving 'down' to AIM does not lead to a long term decrease in shareholder returns, as might be expected if poor performance was the cause of the move. Jenkinson and Ramadorai explain this in terms of the different regulatory costs of the two markets; the trading technology and the framework of UK law are the same for both. They speculate that firms may have different regulatory preferences, based on costs. We agree: the transaction costs of switching are high *and these costs include loss of social capital*. With just 30 Nomads supervising £98bn of capitalization, AIM remains a tight network.

The main market is a main board exchange regulated on 'Fama' principles to be efficient. Where social networks and norms emerge in such a market, they are to be viewed with suspicion as market imperfections and eradicated. By contrast, evidence of stable networks, and thus counterparty identity, are central to AIM. We have shown that social structures were designed into AIM from its very outset, and that its distinctive regulatory identity depends upon relations of interpersonal knowledge, obligation, reputation and other affectual bonds between participants. We have shown how market goods, i.e. tradable securities in young or growing firms, emerge through a process of qualification (Callon, Méadel, and Rabeharisoa 2002) between buyers and sellers, here investors and Nomads. AIM has been successful in terms of attracting firms and investors; we argue that its structure is informationally efficient because AIM is an example of a 'Whitean' producer market. This is the fourth part of our argument. For White, producer markets, which he suggests are the dominant form in US business, are characterised as stable networks of mutually aware actors sending reputationally weighted signals of quality and volume within identifiable market boundaries. Producers

"come to treat each other and to be treated by the outside world as structurally equivalent through the evolution of input and output networks of ties.... Knowing

oneself, and being known, to be in a given market is the single most important aspect of getting established in business.” (White 2002, 121).

The core ‘producers’ on AIM are Nomads. White argues (e.g. 2002, 177-99) that producer markets have ‘upstream’ and ‘downstream’ elements. ‘Upstream’ in AIM is the supply of shares from listed companies and ‘downstream’ is investor demand for such shares. In a producer market, actors relate to other producers, not simply to their products, since contracts tend to be relational rather than transactional. In AIM, investors tend to rely on the Nomad’s reputation, rather than a painstaking analysis of the fundamentals of the Nomad’s specific firms; our data show how investors build long-term relationships with Nomads and brokers, both of which are governed by the threat of exclusion from the market, in the case of malfeasance. Such a situation is that envisaged by Coase when he wrote that ‘the opportunity to trade on the exchange is of great value and the withholding of permission to trade is a sanction sufficiently severe to induce most traders to observe the rules’ (1988, 10) yet it has been achieved in a manner quite different from the Fama structure. The Nomad signals listed firm quality and price to investors such that the latter needs no further search to establish a price that is an accurate signal of future revenue. Where a Fama market seeks to dissolve social bonds, AIM’s governance (to paraphrase the call) “creates and rearranges social, technical, emotional, legal, sentimental and practical links between reflexively aware producers of investment information. We might therefore conclude, in the final part of our argument, that AIM is an (informationally) efficient producer market, and a producer market is a viable design option for a financial exchange.

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